APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,929	03/02/2004	Curtis B. Johnson	H0006338-0779	3823

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Kris T. Fredrick
Honeywell International, Inc.
101 Columbia Rd.
P.O. Box 2245
Morristown, NJ 07962

EXAMINER
BROWN, VERNAL U

ART UNIT	PAPER NUMBER
2635	

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 March 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

The application of Curtis Johnson for Embedded Automotive Latch Communications

Protocol filed 3/02/2004 has been examined. Claims 1-20 are pending.

Claim Objections

Claims 11-13 are objected to because of the following informalities: There is a

typographical error on line 5 of claim 11 on page 24. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 and 11, 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Steiner US Patent 6577226 in view of Lightner et al. US Patent 6732031.

Regarding claims 1-3, 11, 13-16, Steiner teaches a latch communications system (figure

2), comprising: a communications receiver and transmitter unit (68) associated with a latch (22);

an interface component (90) for interfacing with said communications receiver and transmitter

unit (col. 4 lines 41-45, col. 4 lines 62-65), wherein said interface component is co-located with

said communications receiver and transmitter unit in association with said latch in the vehicle

door 18 as shown in figure 2; an interpreter (66) associated with the interface component and the

communications and transmitter unit, wherein said interpreter processes information received

from said communications receiver and transmitter unit in order to provide latch functionalities

(col. 4 lines 38-45). Steiner is silent on teaching providing latch diagnostics. Lightner in an art

related vehicle diagnostic system for vehicle invention teaches a host computer (12) interfacing

with a vehicle system for providing diagnostic including the status of the door lock system (col.

6 lines 36-40) in order to characterized a vehicle performance and to detect problem relating to

the operation of the vehicle.

It would have been obvious to one of ordinary skill in the art for the interpreter to provide

latch diagnostics in Steiner as evidenced by Lightner et al. because Steiner teaches a wireless

control system for a vehicle for controlling the vehicle functionalities and teaches a host

computer interfacing with a vehicle system for providing diagnostic including the status of the

door lock system in order to characterized a vehicle performance and to detect problem relating

to the operation of the vehicle.

Regarding claims 4 and 17, Steiner teaches a wired connection between the interpreter 66

and the transceiver 68 as shown in figure 2.

Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steiner

US Patent 6577226 in view of Lightner et al. US Patent 6732031 and further in view of Heaston

et al. US patent 5748422.

Regarding claims 5 and 18, Steiner teaches a wired connection between the interpreter 66

and the transceiver 68 as shown in figure 2 but is silent on teaching a voltage level shifter for

transforming voltage level for communication with the interface component. Heaston et al. in an

art related power latch invention teaches the use of a voltage level shifter for transforming a

voltage to a desired level (col. 6 lines 21-30) in order to satisfy the voltage level requirement of

an interface unit.

It would have been obvious to one of ordinary skill in the art to have a voltage level

shifter in Steiner in view of Lightner et al. as evidenced by Heaston et al. because Onuma et al

suggests an interpreter interfacing with the transceiver and Heaston et al. teaches the use of a

voltage level shifter for transforming a voltage to a desired level in order to satisfy the voltage

level requirement of an interface unit.

Claims 6-10, 12, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Steiner US Patent 6577226 in view of Lightner et al. US Patent 6732031 and further in

view of Knight et al. US Patent 20030167345.

Regarding claims 6-10, 12, and 19-20, Steiner teaches an interface for transmitting and

receiving data between the transceiver 68 and the controller (interpreter) 66 as shown in figure 2

but is silent on teaching the interface comprises a UART. Knight et al. in an art related vehicle

communication system invention teaches the use of a UART in the vehicle communication

interface (paragraph 00189) and the UART transmits in parallel by assembling the bit received

into bytes and transmitting the assembled bytes to the processor (paragraph 0188). Knight et al.

further teaches integrating the UART and having the UART separate (paragraph 0164) based on

the desired application.

It would have been obvious to one of ordinary skill in the art for the interface to comprise

a UART in Steiner in view of Lightner et al. as evidenced Knight et al. because Steiner suggests

an interface for transmitting and receiving data between the transceiver 68 and the controller and

Knight teaches the use of a UART in a vehicle communication system in order to facilitate the

transfer of data between devices with different communication protocol.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Vernal U. Brown whose telephone number is 571-272-3060. The

examiner can normally be reached on 8:30-7:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vernal Brown
October 25, 2005

BRIAN ZIMMERMAN
PRIMARY EXAMINER